

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
21 May 2004 (21.05.2004)

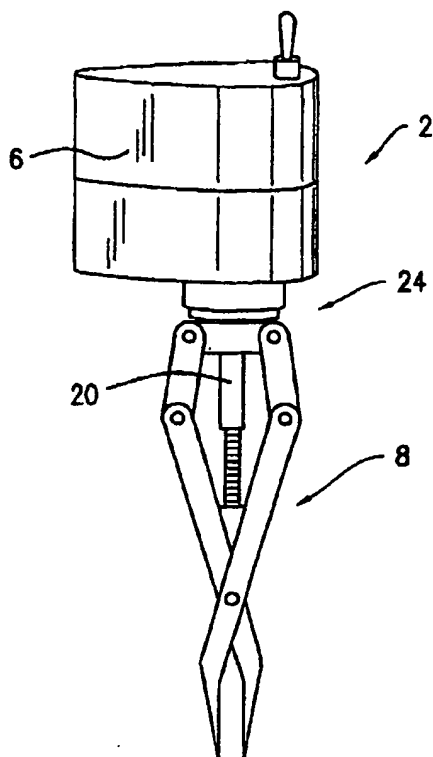
PCT

(10) International Publication Number  
**WO 2004/041066 A3**

- (51) International Patent Classification<sup>7</sup>: **A61B 17/60**
- (21) International Application Number:  
PCT/US2003/034390
- (22) International Filing Date: 30 October 2003 (30.10.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/422,300 30 October 2002 (30.10.2002) US  
60/422,320 30 October 2002 (30.10.2002) US
- (71) Applicant: **MEKANIKA, INC.** [US/US]; Suite 210, 3998  
F.A.U. Boulevard, Boca Raton, FL 33431 (US).
- (72) Inventor: **HOLMES, David, C.**; Mekanika Inc., Suite  
210, 3998 F.A.U. Boulevard, Boca Raton, FL 33431 (US).
- (74) Agent: **KIPNES, Allen, R.**; Watov & Kipnes, P.C., P.O.  
Box 247, Princeton Junction, NJ 08550 (US).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,  
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,  
UG, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (BW, GH,  
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,  
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,  
GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report

[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR MEASURING INSTABILITY OF A MOTION SEGMENT UNIT OF A SPINE



(57) Abstract: Apparatus and method for measuring spinal instability through the use of a distractor arm assembly (8) having segments pivotal with respect to each other and movable through the movement of a pivotal collar assembly (24) along a centrally positioned jackscrew (20).

WO 2004/041066 A3



— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(88) Date of publication of the international search report:  
5 August 2004

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/34390

<b>A. CLASSIFICATION OF SUBJECT MATTER</b> IPC(7) : A61B 17/60 US CL : 606/90,102 According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b> Minimum documentation searched (classification system followed by classification symbols) U.S. : 606/90,102  Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EAST		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5,935,151 A (BROUGHTON et al) 10 August 1999 (10.08.1999), See all.	1-20
A	US 5,776,054 A (BOBRA) 07 July 1998 (07.07.1998), See all.	1-20
A	US 4,899,761 A (BROWN et al) 13 February 1990 (13.02.1990), See all.	1-20
A	US 3,750,652 A (SHERWIN) 07 August 1973 (07.08.1973), See all.	1-20
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search 25 May 2004 (25.05.2004)		Date of mailing of the international search report 23 JUN 2004
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Authorized officer <i>Sharon H. Greene for</i> David J. McCrosky Telephone No. 703-308-0858